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EXAMINER

CHEA, PHILIP J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/656,904	Applicant(s) MOROMISATO ET AL.	
	Examiner PHILIP J. CHEA	Art Unit 2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/17/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53,55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This Office Action is in response to an Amendment filed April 17, 2009. Claims 1-53,55 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-53,55 are rejected under 35 U.S.C. 102(b) as being anticipated by Levine, Joe ("Ten Minute Guide to Groove 2.0").

As per claims 1,27, Levine discloses a method for providing information and services of a collaboration system adapted for communicating changes to at least one shared space in a data change format that allows a plurality of members to interact collaboratively in a shared folder (see "The Groove Difference", *describing how Groove is a platform similar to an operating system like Microsoft Windows, and groups of people are connected through "shared spaces", and how all shared space content and changes are automatically saved and synchronized*) in a folder-based file system that is part of an operating system with a user interface (*where Microsoft Windows is a folder-based file system that is part of an operating system, that is Windows Explorer (folder based file system) is part of the Microsoft Windows operating system*), the method comprising:

including a collaborative interface in the operating system user interface, the collaborative interface adapted to receive user input identifying at least one synchronized file (see "Lesson 17 Grooves Files Tool", *describing how to add a file to the shared space in an operating system user interface i.e. right click on a file, by selecting a folder in which to add files, and see above regarding the synchronization of all content in the shared space*);

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using the collaborative interface to display information regarding the members collaborating within the context of a share folder through the use of the collaboration system (see "Changing Member Roles in a Shared Space", *describing a collaborative interface to display information about members and their roles within the shared space*);

automatically determining changes made in the folder-based file system (see "Co-Editing or Co-Viewing Microsoft Word or PowerPoint Files", *describing how updates to the files are seen by members of the shared space and how updates are automatically sent to all other members*), the folder-based file system being separate from the shared space of the collaboration system (see Figure 17.12, *showing how the Groove toolbar appears in Word during a co-edit session*; since Word runs in a folder-based file system i.e. Microsoft Windows, the shared portion of the Groove toolbar shared space (see Fig. 17.14) runs on top of the folder-based file system, that is, it's a separate program running on top of the folder based file system that determines changes made to the Word document that is located in the folder based file system, that is, the document is located in a folder somewhere in the operating system folder-based file system, and when changes are made to the document, people using the Groove toolbar know about the changes);

in response to a determined change, determining whether the changes relates to the at least one synchronized file (see "Co-Editing or Co-Viewing Microsoft Word or PowerPoint Files", and Fig. 17.15 *describing a determination of a file that is being edited*); and

when the changes relates to the at least one synchronized file, communicating the change to other members via at least one data change message formatted in accordance with the data change format of the collaboration system (see "Managing How Tools Inform You About New or Changed Information", *describing methods of notifying users of a changes made to content items i.e. file changes or discussions about file changes*).

As per claims 2,28, Levine further discloses designing and implementing a portion of the user interface as the collaborative interface (see "Getting Oriented in the Groove Transceiver", *showing how the collaboration interface is implemented in the user interface of the operating system*).

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As per claims 3,29, Levine further discloses enhancing the user interface to include the collaborative interface (see “Getting Oriented in the Groove Transceiver”, *showing how the collaboration interface is implemented in the user interface of the operating system*).

As per claims 4,30, Levine further discloses replacing a portion of the user interface with the collaborative interface (see “Lesson 17 Groove Files Tool”, *showing how a Files tool replaces Windows Explorer*).

As per claims 5,31, Levine further discloses creating a shared space within the collaboration system associated with the synchronized file (see “Lesson 17 Groove File Tool”).

As per claims 6,32, Levine further discloses using the collaborative interface to invite one of the plurality of members to join the shared space (see “Lesson 8 Sending and Receiving Shared Space Invitations”).

As per claims 7,33, Levine further discloses displaying information regarding members in the shared space (see “Detecting the Presence of Contacts: Who’s Online, Offline, and Idle”).

As per claims 8,34, Levine further discloses that wherein the information regarding members in the shared includes awareness information that indicates whether each member is on-line and available (see “Detecting the Presence of Contacts: Who’s Online, Offline, and Idle”).

As per claims 9,35, Levine further discloses that each synchronized file in the folder-based file system, maintaining a snapshot that contains sufficient information to allow a determination to be made whether that file has changed (see “Managing How Tools Inform You About New or Changed Information”).

As per claims 10,36, Levine further discloses receiving a notification from the folder-based file system that changes have been made to the folder-based file system and in response to the notification, examining each file snapshot to determine which file has changed (see “Managing How Tools Inform You About New or Changed Information”).

As per claims 11,37, Levine further discloses connecting the collaborative system via a web services interface (see “Part IV: Communications and Account Management”).

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As per claims 12,38, Levine further discloses maintaining a list of members who are in the shared folder (see “Detecting the Presence of Contacts: Who’s Online, Offline, and Idle”).

As per claims 13,39, Levine further discloses for each member who is in the shared folder, maintaining information indicating whether that member has a copy of contents of each synchronized file in the shared folder (see “Co-Editing or Co-Viewing Microsoft Word or PowerPoint Files”).

As per claims 19,45, Levine further discloses using the collaborative system to disseminate file changes to members in the shared folder (see “Lesson 24 Survey of Other Groove Shared Space Tools”).

As per claims 21,47, Levine further discloses using the collaborative interface to create a shared space underlying the operating system shared folder within which collaboration will occur (see “Lesson 17 Groove Files Tool”) and wherein the method further comprises:

forwarding a change made in the shared space to a file to a document share engine in the shared space; and

using the document share engine to make the file change to a corresponding file in the folder-based file system (see “Keeping Your Account Synchronized on Multiple Computers”).

As per claims 22,48, Levine further discloses using a file synchronizer in the collaborative system that makes the change in the folder based file system under control of the document share engine (see “Managing How Tools Inform You About New or Changed Information”).

As per claims 23,49, Levine further discloses using the document share engine to notify each of the plurality of members that a file change has occurred (see “Managing How Tools Inform You About New or Changed Information”).

As per claims 24,50, Levine further discloses using the document share engine to display in the collaborative interface a list of the plurality of members and an indicator showing which of the plurality of members has opened a selected synchronized file (see “Co-Editing or Co-Viewing Microsoft Word or PowerPoint Files”).

As per claims 25,51, Levine further discloses that the collaborative interface comprises an on-line chat mechanism (see “Part II: Instant Activities”).

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As per claims 26,52, Levine further disclose that the collaborative interface comprises a mechanism for creating and storing comments related to the selected file (see “Lesson 24 Survey of Other Groove Shared Space Tools”).

As per claim 53, Levine discloses a computer program product for providing information and services of a collaboration system that allows a plurality of members to interact collaboratively in a shared folder in a folder-based file system that is part of an operating system with a user interface (see “The Groove Difference”, *describing how Groove is a platform similar to an operating system like Microsoft Windows, and groups of people are connected through “shared spaces”, and how all shared space content and changes are automatically saved and synchronized*), the computer program product comprising a computer storage medium having computer readable program code thereon, including:

program code for including a collaborative interface in the user interface through which a user may select at least one shared folder (see “Lesson 17 Groove Files Tool”);

program code for using the collaborative interface to display information regarding the plurality of members collaborating within the context of the shared folder through the use of the collaborative system (see “Creating a Shared Space Fig. 7.2”);

program code for receiving from the operating system an event notification indicating a change within the folder-based file system (see “Managing How Tools Inform You About New or Changed Information”);

program code for determining whether the change made in the folder-based file system relates to the at least one shared folder, the program code for determining comprises program code for maintaining a snapshot of at least one file (see “Managing How Tools Inform You About New or Changed Information”) in a shared folder separate from the folder-based file system (see Figure 17.12, *showing how the Groove toolbar appears in Word during a co-edit session; since word runs in a folder-based file system i.e. Microsoft Windows, the shared portion of the Groove toolbar shared space (see Fig. 17.14) runs on top of the folder-based file system, that is, it’s a separate program running on top of the folder based file system*); and

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program code for communicating the change to other members via the collaboration system (see "Co-Editing or Co-Viewing Microsoft Word or PowerPoint Files", *describing how updates to the files are seen by members of the shared space and how updates are automatically sent to all other members*).

As per claim 55, Levine further discloses program code for receiving from a member of the other members of the collaboration system an indication of a second change relating to the at least one shared folder (see "Co-Editing or Co-Viewing Microsoft Word or PowerPoint Files"); and

program code for applying the second change to the folder-based file system, whereby the shared folder is synchronized among the members of the collaboration system (see "Co-Editing or Co-Viewing Microsoft Word or PowerPoint Files").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-18,40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levine as applied to claims 13 and 39 above, and further in view of Therrien et al. (US 2004/0088382), herein referred to as Therrien.

As per claims 14,40, although the system disclosed by Levine shows substantial features of the claimed invention (discussed above), it fails to disclose providing a stub file to each shared folder member who does not have the contents of a synchronized file.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Levine, as evidenced by Therrien.

In an analogous art, Therrien discloses a data repository system that provides a hierarchical storage management to move contents of files (see paragraph 2). Further showing that when a file is not located in it's original location (i.e. the file has been moved to a new fileserver), a stub file is left in place

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(see paragraphs 70-72, *describing how a stub file is a file that appears normal but instead includes a pointer to the actual location of the file*).

Given the teaching of Therrien, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Levine by employing a stub file, such as disclosed by Therrien, in order to view the file even though it has been moved from its original location.

As per claims 15,41, Therrien further discloses displaying the stub file in the user interface (see paragraph 72, *showing how a client can view the files once connected to the new fileserver*).

As per claims 16,42, Therrien further discloses downloading file contents from a source when a user selects the stub file display (see paragraph 72, *describing that the files are transferred from a repository node to the fileserver implying a download of the file*).

As per claims 17,43, Therrien further discloses that the source comprises a server (see paragraph 72).

As per claims 18,44, Levine further discloses that the source comprises a computer of another member (see "Requesting a New Invitation from Another Member", *where the file can be downloaded to a user computer; and Therrien's teaching of a stub file would point to the location of the user computer*).

5. Claims 20,46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levine as applied to claims 19,45 above, and further in view of Oprescu-Surcobe (US 6,356,961).

As per claims 20,46, although the system disclosed by Levine shows substantial features of the claimed invention (discussed above), it fails to disclose that the file changes are disseminated only as compressed representations of such changes, as binary differences, rather than the entire file contents.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Levine, as evidenced by Oprescu-Surcobe.

In an analogous art, Oprescu-Surcobe discloses a system for editing versions of documents where the version differences are disseminated only as compressed representation of such changes, as binary differences, rather than entire file contents (see column 3, line 66 – column 4, line 3).

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Given the teaching of Oprescu-Surcobe, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Levine by employing binary difference representation, such as disclosed by Oprescu-Surcobe, in order to communicate a least amount of data between source and destination devices necessary to effectuate the generation of an edited version of a document.

Response to Arguments

6. Applicant's arguments filed April 17, 2009 have been fully considered but they are not persuasive.

A) Applicant contends that Levine does not teach automatically determining changes made in the folder-based file system.

In considering A), the Examiner respectfully disagrees. The files and documents that are "added" to the shared space reside on the folder-based file system. Therefore, any changes that are made to the file or document are made on the folder-based file system. The fold-based file system is separate from the shared space because it is file-system that is part of the operating system. The shared space merely runs on top of the folder-based system and is a separate program, but files and documents are still located on the folder-based system of which the shared space runs. Any changes made to the files in the shared space are also being made to the files on the fold-based file system because that is where they are stored.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. CHEA whose telephone number is (571)272-3951. The examiner can normally be reached on M-F 6:30-4:00 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Philip J Chea
Examiner
Art Unit 2453

/Philip J Chea/
Examiner, Art Unit 2453
6/15/09